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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,513	12/05/2003	Nobuaki Ogawa	P24662	7838
7055 7590 01/22/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER HAMO, PATRICK	
			ART UNIT 3746	PAPER NUMBER
			NOTIFICATION DATE 01/22/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary

Application No.

10/727,513

Applicant(s)

OGAWA ET AL.

Examiner

Patrick Hamo

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 21, 2007 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al., Pub. No. 2002/0039532 in view of Kurihara et al., 7,083,399.

Saito discloses an electric compressor 10 with a compression mechanism 75 which sucks, compresses and discharges fluid, an electric motor 80 which drive the compression mechanism, a housing 51, 52 containing the compression mechanism and the motor, and an inverter 2 which drives the motor, wherein an inverter case 100 of the inverter is externally attached (via bolts 53b) to an end wall of the housing in an axial direction, adjacent to a suction port 10 which introduces fluid into the compression mechanism, an intake passage 8 which returns fluid from an outside of the compressor

into the suction port, wherein the suction port is provided in the inverter case 100, the inverter case having an end surface connected to an end wall of the housing (where the two surfaces meet at bolt 53b) and wherein the intake passage has a thermal binding portion (partition wall 104) which thermally binds the intake passage to the inverter and has a plurality of fins 106 projecting into a fluid path of the intake passage, the thermal binding portion positioned adjacent to substantially an entire area of the inverter (see fig. 1), the housing divided into an inverter attachment side 52 and an opposing side 51 in an axial direction, a connection pin of a compressor terminal 84 which connects the electric motor to the outside and is directly connected to a circuit board 4 of the inverter, the compressor terminal having a seal portion (p. 3, paragraph 37) provided in a connection port of the inverter case, the seal portion being connected to an inside of the housing (see fig. 1). Saito does not disclose that the thermal binding portion is positioned within the inverter case.

However, Kurihara teaches a motor-driven compressor where the motor is driven by an inverter 40, and wherein the inverter is housed in a region of the housing that includes an intake passage 56 and a thermal binding portion 11b whereby heat is exchanged between the inverter and the flow of fluid through the intake passage. The inverter is housed in a region of the compressor between plate 50 and cover 15, and the region bounded by these two and the cylindrical housing is in effect an inverter case. The intake passage and the thermal binding portion are unquestionably within this case (see fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art that it was a matter of engineering design choice to exchange heat between an inverter and

a fluid flow with a finite number of combinations to try, namely that of an intake passage and thermal binding portion within an inverter case or adjacent to an inverter case, both options predictable in their success at obtaining the desired result of heat exchange.

Claims 2, 4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 above in view of Makino et al., 6,808,372.

The references as applied to claim 1 above disclose all of the limitations substantially as claimed except for the following: an inverter case externally attached to an end wall of the housing in an axial direction proximate a discharge side from the compression mechanism, and mounting legs configured to mount the compressor either horizontally or at an incline with respect to the axial direction.

However, Makino teaches a case 126 for inverter 101 mounted on top of a compressor near a discharge pipe 17 and mounting legs 34 provided in the housing for mounting the compressor in order to reduce the axial dimensions of a compressor/motor combination (col. 1, ll. 50-58). The position of mounting also includes a suction port 16 which includes a passage 132 that goes through the end wall to which the inverter is attached.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the references as applied to claim 1 above with the inverter case arrangement and mounting legs of Makino in order to make the assembly shorter in the axial direction.

Response to Arguments

Applicant's arguments with respect to claims 1, 3 and 5-7 have been considered but are moot in view of the new ground(s) of rejection.

In regards to the applicant's arguments concerning the limitations in claim 2 that do not appear in claim 1, namely that the inverter case is externally attached to an end wall, said end wall having a suction port which returns fluid to the compression mechanism, the arguments have been fully considered but they are not persuasive. In the rejection above, the examiner clarified and distinctly pointed out the feature of Makino that was implicit in the prior action, namely that Makino did in fact teach a suction port in the end wall to which the inverter case was attached. Therefore, the rejection of claim 2 and its dependents under 35 U.S.C. §103 stands.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

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PATENT EXAMINER


1/15/08